Docket No.: 0425-1233PUS1 Art Unit: 1791 Page 2 of 11

## AMENDMENTS TO THE CLAIMS

(Currently Amended) A method of producing a pulp sheet, comprising adding a
powder composition directly to a pulp slurry or adding a dispersion of the powder composition in
water to the pulp slurry.

the powder composition for-paper-manufacturing, comprising a hydrophobic organic compound (A) to be used as a paper manufacturing agent, an emulsifying and dispersing agent (B), and a water-soluble saccharide (C), wherein the powder composition has an average particle diameter of 0.1 to 2,000  $\mu$ m, and wherein the hydrophobic organic compound (A) is at least one compound selected from the group consisting of the following groups (i) to (viii), and mixtures thereof:

- (i) organopolysiloxane compounds;
- (ii) amine compounds;
- (iii) amineacid salt compounds:
- (iv) quaternary ammonium compounds;
- (v) imidazole compounds;
- (vi) hydrocarbon compounds;
- (vii) alcohol compounds: and
- (viii) at least one compound having a carbonyl group and an alkyl group in a molecule and selected from the group consisting of the following groups (viii-a) to (viii-d), and mixtures thereof:
- (viii-a) aliphatic acids or their addition products of alkylene oxide having 2 to 4 carbon atoms;
- (viii-b) esters of aliphatic acids and alcohols or their addition products of alkylene oxide having 2 to 4 carbon atoms:
- (viii-c) aliphatic acid amides or their addition products of alkylene oxide having 2 to 4 carbon atoms; and
- (viii-d) aliphatic acid amideamines or their addition products of alkylene oxide having 2 to 4 carbon atoms:

wherein the water-soluble saccharide (C) is selected from the group consisting of dextrin, maltodextrin, cyclodextrin, and octenylsuccinic acid starch; Application No. 10/560,582 Amendment dated October 29, 2009 Response to Office Action dated July 29, 2009 Docket No.: 0425-1233PUS1 Art Unit: 1791 Page 3 of 11

wherein the hydrophobic organic compound (A) and the emulsifying and dispersing agent (B) are evenly dispersed and enclosed within the water-soluble saccharide (C); and

wherein the emulsifying and dispersing agent (B) is a copolymer comprising composing units derived from at least one kind of non-ionic monomer having a dissolution parameter of 20.5 (MPa)<sup>1/2</sup> or lower and at least one kind of cationic monomer.

## 2. (Cancelled)

3. (Currently Amended) The <u>method</u> eomposition according to claim 1, wherein the hydrophobic organic compound (A) is a bulking agent.

## 4-5. (Cancelled)

- 6. (Withdrawn) A bulking agent for paper comprising an ester compound ( $\alpha$ ) of a polyhydric alcohol and fatty acid and having an esterification ratio of OH of the polyhydric alcohol per 1 mole in a range of 10 to 95 % by equivalent, HLB 1 to 14, and a melting point  $100^{\circ}$ C or lower and a copolymer ( $\beta$ ) comprising composing units derived from at least one kind of non-ionic monomers having a dissolution parameter of 20.5 (MPa)<sup>1/2</sup> or lower and at least one kind of cationic monomers, wherein the content of ( $\alpha$ ) in the total of ( $\alpha$ ) and ( $\beta$ ) is 80 to 99.9% by weight.
- 7. (Withdrawn) A bulking agent for paper comprising an ester compound ( $\alpha$ ) of a polyhydric alcohol and fatty acid and having an esterification ratio of OH of the polyhydric alcohol per 1 mole in a range of 10 to 95 % by equivalent, HLB 1 to 14, and a melting point  $100^{\circ}$ C or lower and a copolymer ( $\beta$ ) comprising composing units derived from at least one kind of a non-ionic monomer having a dissolution parameter of 20.5 (MPa)<sup>1/2</sup> or lower and at least one kind of cationic monomers, wherein the contents of ( $\alpha$ ) and ( $\beta$ ) are 80 to 99.9% by weight for ( $\alpha$ ) and 0.1 to 20% by weight for ( $\beta$ ).

Response to Office Action dated July 29, 2009

Docket No.: 0425-1233PUS1 Art Unit: 1791 Page 4 of 11

8. (Withdrawn) The bulking agent for paper according to claim 7, wherein the ratios (on the basis of raw materials) of the composing unit of the copolymer (β) are 0.5 to 50% by mole of a component unit derived from nonionic monomer having a dissolution parameter of 20.5 (MPa)<sup>1/2</sup> or lower and 50 to 95.5% by mole of a component unit derived from the cationic

monomer.

9. (Withdrawn) The bulking agent for paper according to claim 7, wherein the agent is

in an emulsion state.

10. (Withdrawn) A method of producing a bulk sheet, comprising adding the bulking

agent for paper according to claim 7 to a pulp slurry.

11. (Withdrawn) A paper manufacturing chemical agent particle, comprising an oil

chemical agent for paper manufacturing in the form of oil droplets and enclosed in a water-

soluble solid matrix in a dispersed state.

12. (Withdrawn) The paper manufacturing chemical agent particle according to claim

11, wherein the agent further comprises an emulsifying substance.

13. (Withdrawn) The paper manufacturing chemical agent particle according to claim

11, wherein the average oil droplet diameter is in the range of 0.1 to 50 um on the basis of volume.

14. (Withdrawn) The paper manufacturing chemical agent particle according to claim

11, wherein the oil chemical agent for paper manufacturing is used as a bulking agent.

15. (Withdrawn) The paper manufacturing chemical agent particle according to claim

12, wherein the emulsifying substance has cationic property in water.

Docket No.: 0425-1233PUS1 Art Unit: 1791 Page 5 of 11

16. (Withdrawn) A method of producing a paper manufacturing chemical agent particle, comprising dissolving a water-soluble solid matrix forming agent in water at a temperature equal to or higher than the melting point of an oil chemical agent for paper manufacturing; adding the oil chemical agent for paper manufacturing and optionally an emulsifying substance; emulsifying the oil chemical agent for paper manufacturing for obtaining an emulsion; and drying the emulsion at a temperature equal to or higher than the melting point of the oil chemical agent for paper manufacturing.

 (Withdrawn) The method according to claim 16, wherein the drying method is spray drying.

18. (Withdrawn) The method according to claim 16, wherein the emulsifying substance has cationic property in water and liquid diluted with water for the emulsion so as to have a solid content of 10% by weight has a pH of 2 to 6.

## 19. - 22. (Cancelled)

- (New) The method according to claim 1, wherein the content of the hydrophobic organic compound (A) is limited to 50 to 99.99% by weight.
- 24. (New) The method according to claim 1, wherein the mixing ratio of [(A)+(B)/(C)] is limited to (95/5) to (50/50).
- 25. (New) The method according to claim 1, wherein the hydrophobic organic compound (A) is (viii-b).

Application No. 10/560,582 Amendment dated October 29, 2009 Response to Office Action dated July 29, 2009 Docket No.: 0425-1233PUS1 Art Unit: 1791 Page 6 of 11

26. (New) The method according to claim 1, wherein the nonionic monomer with a dissolution parameter of 20.5 (MPa) $^{1/2}$  or lower is an unsaturated monomer selected from the group consisting of (meth)acrylic acid esters with an alkyl having 1 to 40 carbon atoms, fatty acid esters with an alkenyl having 1 to 40 carbon atoms, (meth)acrylamide modified with an alkyl having 2 to 40 carbon atoms, (meth)acrylamide modified with an alkoxy group having 2 to 40 carbon atoms, maleic acid ester with a mono- or di-alkyl having 1 to 40 carbon atoms, furnalic acid ester with a mono- or di-alkyl having 1 to 40 carbon atoms, styrene, vinyltoluene,  $\alpha$ -methylstyrene, ethylene, propylene, butadiene, polyalkylene glycol (meth)acrylate, alkoxypolyalkylene glycol (meth)acrylate, polyalkylene glycol alkenyl ether and alkoxypolyalkylene glycol alkenyl ether.

- 27. (New) The method according to claim 1, wherein the cationic monomer is an unsaturated monomer selected from the group consisting of dimethylaminoethyl (meth)acrylate, diethylaminoethyl (meth)acrylate, dimethylaminopropyl (meth)acrylamide, diethylaminopropyl (meth)acrylamide, allylamine, diallylamine, and triallylamine.
- 28. (New) The method according to claim 1, wherein the amount of the nonionic monomer is 0.5 to 50% by mole of the total monomers.
- 29. (New) The method according to claim 1, wherein the amount of the cationic monomer is 50 to 99.5% by mole of the total monomers.